accuracy is sufficient to achieve a resolution of less than about 1mm.

- 34. (original) A system in accordance with claim 21, wherein said 3D scan data comprise at least one of CT scan data, MRI scan data, and PET (positron emission tomography) data.
- 35. (original) A system in accordance with claim 21, wherein said means for performing a 1D search for said out-of-plane rotation parameters comprises means for performing a similarity measure based on pattern intensity.
- 36. (original) A system in accordance with claim 22, wherein said means for refining the in-plane translation parameters (x,y), said means for refining the in-plane rotation parameter (θ) , and said means for separately refining said out-of-plane rotation parameters (r, ϕ) comprises means for performing one or more similarity measures based on pattern intensity.
- 37. (original) A system in accordance with claim 22, further comprising means for processing said 2D x-ray image so as to match the orientation, image size, and bit depth of said x-ray image with the orientation, image size, and bit depth of said reconstructed image.

D. REMARKS

1. Amendment to the specification

No new matter is added by the amendment to the specification, in section B above. The amendment was made in order to correct a minor typographical error.

2. Amendment to the claims

Claims 1-37 are currently pending in the present application. Claim 1 has been amended. No new matter is made by this amendment. Support for this amendment

can be found, for example, in Applicant's specification paragraph 24, second sentence; and paragraph [0032].

No additional costs are believed to be due in connection with the filing of this preliminary amendment. However, please charge any necessary fees to our Deposit Account No. 50-1133.

If the Examiner believes there are any outstanding issues to be resolved with respect to the above-identified application, he is invited to telephone the undersigned so that such issues may be resolved telephonically.

Respectfully submitted,

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